

**What is claimed is:**

- 1 *Sub*  
2 *22* 1. A method for manufacturing a multi-layered ceramic substrate,  
3 said method comprising the steps of:  
4 forming a shrinkage suppression sheet on both faces of an unfired  
5 green sheet laminated body;  
6 firing said green sheet laminated body on which said shrinkage  
7 suppression sheet is formed on its both faces; and  
8 removing said shrinkage suppression sheet by spraying at least one  
9 of ceramic powder and water together with compressed air onto said shrinkage  
10 suppression sheet on both faces of said green sheet laminated body after firing.
- 1 2. The method for manufacturing a multi-layered ceramic substrate  
2 as defined in Claim 1, wherein said ceramic powder is made of the same material  
3 as the main constituent of a material used for said shrinkage suppression sheet.  
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- 1 3. The method for manufacturing a multi-layered ceramic substrate  
2 as defined in Claim 1, wherein the sintering temperature of said shrinkage  
3 suppression sheet is higher than the sintering temperature of said green sheet  
4 laminated body.  
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- 1 4. The method for manufacturing a multi-layered ceramic substrate  
2 as defined in Claim 1, wherein the pressure of said compressed air is between 3.0  
3 and 5.5 kgf/cm<sup>2</sup>.  
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Sub 02  
1 5. The method for manufacturing a multi-layered ceramic substrate  
2 as defined in Claim 1, wherein a mean particle size of said ceramic powder is not  
3 greater than 10  $\mu\text{m}$ .  
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1 6. The method for manufacturing a multi-layered ceramic substrate  
2 as defined in Claim 1, wherein a mean particle size of said ceramic powder is  
3 between 0.1 and 150  $\mu\text{m}$ .  
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Sub 03  
1 7. The method for manufacturing a multi-layered ceramic substrate  
2 as defined in Claim 1, wherein at least one of said ceramic powder and water is  
3 sprayed together with compressed air onto said shrinkage suppression sheet on  
4 both faces of said green sheet laminated body simultaneously after firing.  
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1 8. The method for manufacturing a multi-layered ceramic substrate  
2 as defined in Claim 1, wherein said sprayed ceramic powder is collected for reuse  
3 in spraying.  
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1 9. A method for manufacturing a multi-layered ceramic substrate in  
2 which a shrinkage suppression sheet is formed on both faces of unfired laminated  
3 green sheets before firing, and said shrinkage suppression sheet is removed after  
4 sintering; wherein said shrinkage suppression sheet is removed by spraying at least  
5 one of water, ceramic powder, and a mixture of ceramic powder and water together  
6 with compressed air.  
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